a support structure expandable between a contracted condition for facilitating introduction into a blood vessel, and an enlarged condition for securing the graft across a weakened region of the blood vessel; and

a biosensor attached to at least one of the graft and the support structure, wherein the biosensor is configured for sensing pressure within the weakened region of the blood vessel when the graft is secured within the blood vessel.

12. (Once Amended) An apparatus for treating an aneurysm within a blood vessel, comprising:

a stent graft comprising a tubular graft, and an expandable support structure; a biosensor attached to the stent graft by one or more filaments, wherein the biosensor is configured for sensing pressure within the weakened region of the blood vessel when the stent graft is secured within the blood vessel;

an elongate member including a proximal end and a distal end adapted for introduction into a blood vessel, the distal end including a distal region for receiving the stent graft in a contracted condition and the biosensor adjacent one another thereon; and a constraint for securing the stent graft to the distal region of the delivery device.

Please add the following new claims 21-24:

21. (New) The stent graft of claim 1, wherein the weakened region of the blood vessel comprises an aneurysmal sac, and the biosensor is configured for sensing a pressure within the aneurysmal sac when the graft is secured within the blood vessel.

22. (New) The stent graft of claim 21, wherein the biosensor comprises a pressure monitoring sensor.

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23. (New) The apparatus of claim 12, wherein the weakened region of the blood vessel comprises an aneurysmal sac, and the biosensor is configured for sensing a pressure within the aneurysmal sac when the stent graft is secured within the blood vessel.

24. (New) The apparatus of claim 23, wherein the biosensor comprises a pressure monitoring sensor.